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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,979	02/06/2006	Bruce A. Dale	2003UR013	3442

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EXAMINER

THOMPSON, KENNETH L

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3672

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,979	Applicant(s) DALE ET AL.	
	Examiner Kenneth Thompson	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-42 and 44-47 is/are rejected.
- 7) ☒ Claim(s) 6 and 43 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/05; 5/06; 4/07</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-11, 13-23, 26, 27, 30-41 and 44-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Lowry et al., US 5,318,119.

Regarding claims 1, 36 and 44, Lowry et al. discloses in figures 1-22 a wellbore apparatus comprising: a first flow joint (S1) in a wellbore, the first flow joint comprising at least one three-dimensional surface defining a first fluid flow path (44a) through the wellbore, at least one section (42) of the first flow joint surface being permeable and at least one section (94) of the first flow joint surface being impermeable. Lowry et al. discloses a second flow joint (S2) in a wellbore, the second flow joint comprising at least one three-dimensional surface defining a second fluid flow path (44a) through the wellbore, at least one section (42) of the second flow joint surface being permeable and at least one section (94) of the second flow joint surface being impermeable. Lowry et al. discloses at least one permeable section of the first flow joint is connected to at least one permeable section of the second flow joint thereby providing at least one fluid flow path between the first flow joint and the second flow joint.

As to claim 2, Lowry et al. discloses the first and second flow joints are selectively perforated basepipes (44).

As to claim 3, Lowry et al. discloses the first flow joint (S1) is adjacent to the second flow joint (S2) in the wellbore:

As to claim 4, Lowry et al. discloses the first flow joint is concentric to the second flow joint in the wellbore.

As to claim 5, Lowry et al. discloses at least one flow joint comprises joints (58,44) of pipe.

As to claim 7, Lowry et al. discloses the joints of pipe (58,44) are connected using flexible joints (60,62).

As to claim 8, Lowry et al. discloses the three-dimensional surface of the first and second flow joints are cylindrical.

As to claim 9, Lowry et al. discloses at least one wellbore annuli (12,14) is utilized as a flow joint.

As to claim 10, Lowry et al. discloses at least one flow joint is a sand screen (col. 6, lines 34-51).

As to claim 11, Lowry et al. discloses in figure 20 the sand screen (106) is a wire-wrapped screen (108, 114) and the wires of the screen are wrapped at varying pitches thereby creating varying levels of permeable sections and impermeable sections.

As to claim 13, Lowry et al. discloses the apparatus is used for producing hydrocarbons (col. 5, lines 44-54).

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As to claim 14, Lowry et al. discloses the apparatus is used for gravel packing (112) a well.

As to claim 15, Lowry et al. discloses at least one impermeable and at least one permeable section are each at least 7.5 centimeters long (col. 7, lines 2-8).

As to claim 16, Lowry et al. discloses at least one impermeable and at least one permeable section are each at least 15 centimeters long (col. 7, lines 2-8).

As to claim 17, Lowry et al. discloses at least one impermeable section (94) of at least one flow joint is adjacent to at least one permeable section (42) of an adjacent flow joint.

As to claim 18, Lowry et al. discloses at any cross-section location (between holes 56) of the apparatus, at least one wall of at least one flow joint is impermeable.

As to claim 19, Lowry et al. discloses at any cross-section location at least one wall of at least one flow joint is impermeable (between holes 56) and at least one wall (42) of at least one flow joint is permeable.

Regarding claim 20, Lowry et al. discloses a first selectively perforated basepipe (S1,44) inside the wellbore defining a first fluid flow path (44a) through the wellbore, with at least one section of the first selectively perforated basepipe being impermeable (94) and at least one section of the first perforated basepipe being permeable; a second selectively perforated basepipe (S2,44) inside the wellbore defining a second fluid flow path (44a) through the wellbore, with at least one section of the second selectively perforated basepipe being impermeable (94) and at least one section of the second

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perforated basepipe being permeable; wherein at least one permeable section of the first and at least one permeable section of the second basepipes are connected (via 58,62,60) to provide at least one flow path between the first and second selectively perforated basepipe.

As to claim 21, Lowry et al. discloses the basepipes are concentric.

As to claim 22, Lowry et al. discloses in figure 22 the basepipes are eccentric (with respect to 14).

As to claim 23, Lowry et al. discloses the basepipes are adjacent.

As to claim 26, Lowry et al. discloses the perforations (56) are chosen based on the relative amount of fluids that will flow through the permeable section (col. 6, lines 59-64).

As to claim 27, Lowry et al. discloses the wellbore annulus (14, 12) is utilized as an additional flow joint.

As to claim 30, Lowry et al. discloses the adjacent joints of pipe are connected with flexible tubes (60,62).

As to claim 31, Lowry et al. discloses at least one impermeable and at least one permeable section are each at least 7.5 centimeters long (col. 7, lines 2-8).

As to claim 32, Lowry et al. discloses at least one impermeable and at least one permeable section are each at least 15 centimeters long (col. 7, lines 2-8).

As to claim 33, Lowry et al. discloses at least one impermeable section (94) of at least one flow joint is adjacent to at least one permeable section (42) of an adjacent flow joint.

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As to claim 34, Lowry et al. discloses at any cross-section location (between holes 56) of the apparatus, at least one wall of at least one flow joint is impermeable.

As to claim 35, Lowry et al. discloses at any cross-section location at least one wall (between holes 56) of at least one flow joint is impermeable and at least one wall of at least one flow joint is permeable (at 42).

As to claim 37, Lowry et al. discloses at least two separate flow paths (44a,22) in the wellbore with at least one connection (10) permitting fluid flow between the flowpaths.

As to claim 38, Lowry et al. discloses the apparatus is used for producing hydrocarbons (col. 5, lines 44-54).

As to claim 39, Lowry et al. discloses the apparatus is used for gravel packing (112) a well.

As to claims 40 and 41, Lowry et al. discloses producing hydrocarbons from the wellbore (col. 5, lines 44-54).

As to claim 45, Lowry et al. discloses producing hydrocarbons through the flow joint (col. 5, lines 44-54).

As to claim 46, Lowry et al. discloses injecting fluids into the well through the flow joints (col. 5, lines 49-53).

As to claim 47, Lowry et al. discloses wrapping the wire (114,108 at varying pitches wherein at least one section (A) of the wire wrapped screen is permeable and at least one section (60) of the wire-wrapped screen is impermeable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12, 28 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowry et al. US 5,318,119 in view of Meldau, US 3,556,219

As to claims 12, 28 and 41 Lowry et al. discloses gravel packing the wellbore. Lowry et al. does not disclose at least one shunt tube in at least one flow joint. Meldau teaches use of a shunt tube (11) to provide an alternate fluid path. It would have been obvious to one having ordinary skill in the art at the time of the invention to arrange for the flow joints disclosed by Lowry et al. to have a shunt tube, as taught by Meldau to provide an alternate flow path since the use of shunt tubes is well known in the art.

Claims 24, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowry et al. US 5,318,119 in view of Fast, US, 4,064,938

As to claims 24 and 25, Lowry et al. does not disclose at least one concentric nor eccentric basepipe is larger than at least one concentric nor eccentric basepipe and further comprising at least one additional wall inside the larger basepipe to provide at least one additional flow path inside the outer basepipe. Fast teaches in figure 2 use of at least one concentric nor eccentric basepipe 16) being larger than at least one concentric nor eccentric basepipe (10) and further comprising at least one additional

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wall (18) inside the larger basepipe to provide at least one additional flow path inside the outer basepipe to deflect the stream of fluid entering the wellbore thereby reducing the erosion of the wire screen (col. 2, lines 24-38). It would have been obvious to one having ordinary skill in the art at the time of the invention arrange for the basepipes disclosed by Lowry et al. to be larger than at least one concentric nor eccentric basepipe and further have at least one additional wall inside the larger basepipe to provide at least one additional flow path inside the outer basepipe, as taught by Fast to extend the useful life of the wire screen.

As to claim 29, Fast teaches use of at least three flow paths (10,14,16) available through a wellbore.

Allowable Subject Matter

Claims 6 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

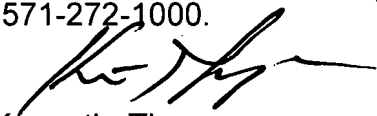
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Thompson whose telephone number is 571 272-7037. The examiner can normally be reached on 7:00 am - 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11 June 2007



Kenneth Thompson
Primary Examiner
Art Unit 3672